42. A rotary brush cutting and shredding blade for mounting to driven shaft of motorized brush cutter, comprising:

a circular disk member constituting bilateral planes and having both top and bottom sides circumscribed by a peripheral border, with serrated cutting elements disposed on said peripheral border in a direction of rotation of said disk member for cutting, and a center aperture for mounting of said disk member to said driven shaft with the top side adapted to face toward the upper continuous extend of said driven shaft and the bottom side adapted to face away from the lower terminus of said driven shaft, for urging circular movement of said disk member in the disposed direction of rotation;

at least one auxiliary cutting means extending below said disk when mounted to said shaft and having an unsevered angular juncture with the disk member and having three sides severed, and said auxiliary cutting means located radially outward of said central aperture position and radially inward of said peripheral border, said auxiliary cutting means deflected substantially out of the plane of said bottom side of said planar disk member;

each said auxiliary cutting means including structures having predetermined surface configurations, whereby adherence of debris is impeded and shedding of debris is urged by centrifugal forces and manufacturing is simplified and economized, and said unsevered angular junctures oriented lengthwise

into the direction of rotation, whereby said auxiliary cutting means are made impact resistant and strengthened, and whereby said auxiliary cutting means provide both axial and radial cutting and shredding capabilities.

2 13. A rotary brush cutting and shredding blade as defined in claim 42 further including said auxiliary cutting means three or fewer in number, symmetrically, equiangularly and circularly disposed, whereby an inherently natural balance is achieved and whereby each of said auxiliary cutting means follows in the path of the preceeding one during rotation to deepen the cut and to provide enhanced shredding, and where a smooth surface is provided between said auxiliary cutting means to provide for unobstructed debris clearing.

3 14. A rotary brush cutting and shredding blade as defined in claim 42 further including said unsevered angular juncture radially inclined inward from a trailing end to a leading end of each said auxiliary cutting means, whereby both a raking and an enhanced shredding and debris clearing action is provided, as centrifugal forces urge debris from said leading end toward said trailing end of the angular juncture for final ejection, and whereby snagging is precluded during radial cutting.

4 15. A rotary brush cutting and shredding blade as defined in claim 42, wherein each said auxiliary cutting means includes a predetermined, corresponding void therein, positioned radially outward of the unsevered juncture, whereby debris

collection is precluded and whereby close blade nesting by vertical stacking of multiple blades is provided, as each auxiliary cutting means of each said blade in a lower flat laid position can protrude upwards into said voids of several stacked blades in an upper flat laid position immediately adjacent to and above, or if positioned conversely, whereby each said auxiliary cutting means of each blade in an upper flat laid position can protrude downward into said voids of several stacked blades in a lower flat laid position immediately adjacent to and below, whereby convenient nesting is provided for efficient handling, packaging, shipping and storage.

S 46. A rotary brush cutting and shredding blade as defined in claim 42, wherein each said auxiliary cutting means further includes substantial, semicircular stress relief and debris clearing aperture at both a leading and trailing end of said auxiliary cutting means, wherein said aperture at said leading end is substantially larger than the aperture at the trailing end.

47. A rotary brush cutting and shredding blade as defined in claim 42, wherein each said auxiliary cutting means has a serrated, substantially semi elliptical structure with a depressed minor axis, wherein a crown height of at least two of said serrations is equal and a line connecting said crown heights is parallel with the bottom surface as seen from disk edge view, whereby equalized wear is provided on said serrations, service life is extended and exceptionally smooth cutting in heavy brush applications is accomplished.

7 ~~48~~. A rotary brush cutting and shredding blade as defined in claim ~~42~~ 1, wherein each said auxiliary cutting means has a rectangular structure having a forward straight cutting edge and an upper serrated cutting edge connected to and extending perpendicular to said forward cutting edge, whereby excessive wear of only said forward cutting edge does not preclude effective continued service through said upper serrated cutting edge and whereby excessive wear of only said upper cutting edge of said auxiliary cutting edge does not preclude continued service through said forward straight cutting edge of each said auxiliary cutting means.

8 ~~49~~. A rotary brush cutting and shredding blade defined in claim ~~42~~ 1, wherein each said auxiliary cutting means has an unserrated, rectangular structure with a single forward cutting edge for cutting and shredding grasses and weeds.

9 ~~50~~. A rotary brush cutting and shredding blade as defined in claim ~~42~~ 1, wherein each said auxiliary cutting means has a substantial materials reserve at the rearward portion thereof whereby during use and repeated sharpening, said cutting edges are permitted to gradually and progressively wear, and whereby the material reserve provides useful and extended service life of said auxiliary cutting means.

10 51. A rotary brush cutting and shredding blade for mounting to driven shaft of motorized brush cutter, comprising:

a circular disk member constituting bilateral planes and having both top and bottom sides circumscribed by a peripheral border, with serrated cutting elements disposed on said peripheral border in a rotational direction of said disk member for cutting, and a center aperture for mounting of said disk member to said driven shaft, with the top side adapted to face toward the upper continuous extend of said driven shaft and the bottom side adapted to face away from the lower terminus of said driven shaft, for urging circular propulsion of said disk member in the disposed direction of rotation;

at least one auxiliary cutting means extending below said disk when mounted to said shaft and having an unsevered angular juncture with the disk member and having three sides severed, and said auxiliary cutting means extending radially outward of the center aperture position and radially inward of said peripheral border, said auxiliary cutting means deflected substantially out of the plane of said bottom side of said planar disk member;

each said auxiliary cutting means including mounting means to receive individual, replaceable cutting elements, whereby upon undue wear or field damage, said cutting elements can be replaced as required and whereby the service life of said circular disk member and said auxiliary cutting means are indefinitely extended;

each said auxiliary cutting means also including structures having predetermined surface configurations, whereby adherence of debris is impeded and shedding of debris is facilitated through centrifugal forces and whereby manufacturing is simplified and economized, and said unsevered angular structures oriented lengthwise into the direction of rotation, whereby said auxiliary cutting means are made impact resistant and strengthened, and whereby said auxiliary cutting means provide both axial and radial cutting and shredding capabilities.

11 52. The blade as defined in claim 10 further including said auxiliary cutting means three or fewer in number, symmetrically, equiangularly and circularly disposed, whereby an inherently natural balance is achieved and whereby each of said auxiliary cutting means follows substantially in the path of the preceding one during rotation, to deepen the cut and to provide enhanced shredding.

12 53. The blade as defined in claim 10 further including said unsevered angular juncture radially inclined inward from a trailing end to a leading end, of each auxiliary cutting means, whereby both a raking action and an enhanced cutting and debris clearing action are provided, as centrifugal forces urge debris from said leading end toward said trailing end of said unsevered angular juncture for final ejection.

13 54. The blade as defined in claim 10 51, wherein each said auxiliary cutting means further includes a predetermined, corresponding void therein, positioned radially outward of the unsevered juncture, whereby debris collection is precluded and, whereby close blade nesting by vertical stacking of multiple blades is provided as each said auxiliary cutting means of each blade in a lower flat laid position can protrude upwards into the said voids of several stacked blades in an upper flat laid position immediately adjacent to and above, or if positioned conversely, whereby each said auxiliary cutting means of each blade in an upper flat laid position can protrude downward into said voids of several stacked blades in a lower flat laid position immediately adjacent to and below and whereby convenient nesting is provided for efficient handling, packaging, shipping and storage.

14 55. The blade as defined in claim 10 51, wherein each said auxiliary cutting means further includes stress relief and debris clearing aperture at the leading and trailing end of said auxiliary cutting means, wherein said aperture at said leading end is substantially larger than the aperture at the trailing end.

15 56. The blade as defined in claim 10 51, wherein each said replaceable cutting element has a ramp structure followed by a recess and at least one cutting tooth in successive order and wherein the crown of said ramp structure is located at substantially lesser distance from the bottom surface of said disk

than the crown of said at least one cutting tooth, whereby the differential serves to define maximum cutting depth of said replaceable cutting element and whereby hazardous torque and kick back reaction is minimized.

16. A brush cutting blade for mounting to a drive shaft manipulated by a handle, said brush blade comprising:

a circular disk having a disk body defining a plane and having top and bottom sides and a peripheral edge, teeth formed on the peripheral edge and defining a direction of rotation of the disk for cutting, and a center mount for mounting the disk to the drive shaft with the top side facing the handle for rotatively driving the disk in the defined direction of rotation;

at least one cutting segment formed out of the disk body positioned radially outward of the center mount and radially inward of the peripheral edge, said segment having a generally curved triangular shape with three sides, one side being unsevered and forming a juncture with the disk body and the other sides extending from said one side radially outward of the center mount severed from the disk body, said segment deflected outwardly of the plane of the disk body toward the bottom side of the disk body at an angled orientation relative to the disk body between positions of co-planar and normal relative to the plane of the